

MATH 3430-002: Ordinary Differential Equations

Syllabus Fall 2019

Instructor

Prof. Czubak
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office: Math 319

Class times & location

MWF 1pm-1:50pm KCEN N100

Class Website

<http://math.colorado.edu/~macz9339/math3430/index.html>

Textbook

Worldwide Differential Equations with Linear Algebra by Robert McOwen.

Prerequisites

Calculus 3, Linear Algebra

Course Description & Learning Objectives

The objective is to acquire specific mathematical knowledge and to practice problem solving and critical thinking.

- **Mathematical Content:** This course is an introduction to the ordinary differential equations (ODE). This includes the theory and solving of the first order and second order ODE, Laplace transform, and systems of first order equations.
- **Critical Thinking & Problem Solving Skills:** The students will practice problem solving, evaluating arguments and conclusions, recognizing when they do not understand something, connecting and synthesizing ideas and transforming them into a new form.

Office Hours

I collect students' schedules, so I can choose office hours that are accessible to almost all, if not all students. If my office hours conflict with your schedule, please make an appointment. I can be also reached by email, and I am happy to answer questions before and after class.

Attendance

Outside of the first two weeks of class, attendance is not recorded. However, if a student misses class, it is the student's responsibility to obtain class notes from another student. The course follows the book relatively closely, but at times, may cover more material or in a different manner than the textbook. The students are responsible for all the material discussed during lectures. When attending the class, the students are expected to follow the guidelines for proper Classroom Behavior (see below).

Homework: *Your success in this course (and most math courses) largely depends on the commitment you make to the HW assignments.* Homework will be posted on the class website.

- You are encouraged to talk to your classmates about the homework AFTER you thought about the problem on your own. If you do talk to other students, you should write down the solution by yourself.

Quizzes: Quizzes will be based on HW and lectures.

For now, you will be allowed to use your own paper to write quizzes. You will be allowed to have only one piece of paper during the quiz. Please make an attempt for the page to be in a good condition, i.e., not roughly torn out off the notebook. If the appropriate quality of the turned in pages will not be met and/or other complications arise, I reserve the right to start to require an official quiz template to be used. The quiz template would be provided online, and you would need to write your quiz using the template to get credit.

The two lowest quiz scores will be dropped. One purpose of dropping the scores is to accommodate any unforeseen circumstances that can prevent you from taking a quiz. Therefore, no make-up quizzes will be given.

Exams: There will be two in-class midterm exams.

Exam 1: Friday, October 4

Exam 2: Friday, November 15

There will be no make-up exams. The lowest midterm exam score will be replaced with the Final exam's score if it is to the student's advantage (provided the final is not canceled by the university).

Two missed midterm exams means the course cannot be completed successfully. Whether it results in a drop, fail, or incomplete, depends on the student's circumstances. Hence if you miss an exam, contact me with a legitimate reason and documentation as soon as possible, but no later than within a week of the missed exam.

If you have any questions about the exam grades, you will have one week from the day the exam is returned to make an inquiry. After one week, no grading inquiries about lost points will be considered. However, you can always ask questions about the correct solution.

Final: The final is mandatory and will be comprehensive. Implicit in registering for this class is your agreement that you will be present to take the final exam.

The final is scheduled to occur on Tuesday, Dec.17, 4:30–7 p.m. The location will be determined by the university, and announced on the class website.

If you have three or more final exams scheduled on the same day, you are entitled to arrange an alternate exam time for the last exam or exams scheduled on that day. If you have two final exams scheduled to meet at the same time, you are entitled to arrange an alternative examination time for the course that meets later in the week during the term or, if the two courses meet on the same day during the term, the course that meets later in the day. Students must make arrangements with the instructor of the affected course(s) by the standard deadline to drop a course in that term and are expected to provide supporting written information of these situations to qualify for exceptions.

More information can be found here.

Determining Course Grade: Quizzes 20%, 2 Exams 50%: 25% each, Final 30%

Accommodation for Disabilities: If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website (here). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website.

Classroom Behavior: Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the Student Code of Conduct.

Students are expected to be on time for class and stay for the entire class period. A proper classroom behavior is expected including but not limited to: having a phone on silent, no talking, no speaking out of turn, no texting, browsing on your phone, etc. Finally, no laptops, iPads, etc., are allowed without the prior permission of the instructor. A failure to behave properly will result in the student being removed from the classroom and/or the course.

Honor Code: I have zero tolerance for academic misconduct. All incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu).

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the Honor Code Office website.

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation: The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the OIEC website. Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

Religious Holidays: Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, quizzes, assignments or required attendance.

In this class, whenever possible, students should notify faculty at least two weeks in advance of the conflict to request special accommodation. We are dropping two quizzes, so there will be no make up for quizzes.

See the campus policy regarding religious observances for full details.